



A new genus, four new species and taxonomic and geographic notes in Mexican Cerambycidae

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Abstract

Four new Mexican species are described: *Ironeus curoei* from Guerrero state, *Psyrassa garciai* from Tamaulipas state, *Psyrassa belangeri* from Guerrero state (Elaphidiini, Cerambycinae); and *Cirrhicera bankoi* from Chiapas state (Hemilophini, Lamiinae). A new Hesperophanini genus, *Makromastax*, and a new combination, *Makromastax mandibularis* are proposed. The current key to the Mexican genera of Hesperophanini is updated to include the new genus. *Haplidus nitidus* Chemsak and Linsley, 1963 is proposed as synonyms of *Haplidus mandibularis* Chemsak and Linsley, 1963. The male of *Eburia* (*E.*) *girouxae* is illustrated by the first time and *Anelaphus hirtus* is redescribed and figured. The geographical distribution of 9 species is expanded, the type locality of *Osmidus guttatus* is corrected, and *Neocompsa intricata* is excluded from the fauna of the United States of America.

Key words: Acanthoderini, Clytini, Eburiini, Elaphidiini, Hemilophini, Neoibidionini, Polyrhaphidini, taxonomy, Trachyderini

Introduction

The Mexican fauna of Cerambycidae has been being studied constantly. In the last 50 years, many authors had reviewed the cerambycid fauna and described and register many new species for the country (*e.g.* Linsley 1957; Chemsak & Linsley 1986; Chemsak *et al.* 1992; Toledo *et al.* 2002; Noguera *et al.* 2009; Noguera 2014; Gutierrez & Noguera 2015). Currently, there are about 1,700 species of Cerambycidae registered for Mexico (Noguera 2014; Tavakilian & Chevillotte 2017), a number that probably will continue growing with the continuous study of more material (Noguera 2014).

We receive for identification Mexican material from the Insectarium de Montréal (Canada). In this material we could find some new species and new geographical records for the country. The new species/records belong to the subfamilies Cerambycinae and Lamiinae. Herein, we describe three new species of Elaphidiini (Cerambycinae) and one new species of Hemilophini (Lamiinae), and register nine new geographical records to the tribes Clytini, Elaphidiini, Trachyderini (Cerambycinae) and Acanthoderini and Polyrhaphidini (Lamiinae). Furthermore, a new Hemilophini genus is proposed and added to a previous key to Mexican genera of Hesperophanini.

Material and methods

Photographs were taken with a Canon EOS Rebel T3i DSLR camera, Canon MP-E 65mm f/2.8 1-5X macro lens, controlled by Zerene Stacker AutoMontage software. Measurements were taken in “mm” using measuring ocular Hensoldt/Wetzlar - Mess 10 in the Leica MZ6 stereomicroscope, also used in the study of the specimens.

The references under each species and genus refer only to the original description and the catalogue by Monné (2017a, b). Additionally, the current record for each species was also checked in Tavakilian & Chevillotte (2017).

The acronyms used in the text are as follows:

IMQC Insectarium de Montréal, Québec, Canada
MZSP Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil
UNAM Universidad Nacional Autónoma de México, Mexico, D. F., Mexico

Results

CERAMBYCINAE

EBURIINI

Eburia (Eburia) girouxae Le Tirant & Santos-Silva, 2016

(Figs. 1–2)

Eburia (Eburia) girouxae Le Tirant & Santos-Silva, 2016: 3; Monné, 2017a: 124 (cat.).

Originally described from a single female from Mexico (Guerrero). We examined the second specimen of the species, a male from the same place as holotype.

The male shares with the holotype female the same type of erect setae on meso- and metafemora, and slightly differs from female: apex of antennomere IX slightly surpassing elytral apex (missing X–XI of right antenna and IX–XI of left antenna); elytra with small, narrow eburneous macula on each side of scutellum (right elytron with very small eburneous macula between the former and humerus). In holotype female, the antennae reach the elytral apex at distal quarter of antennomere IX, and the elytra do not have basal eburneous maculae.

Material examined. MEXICO, *Guerrero*: Xalitla (590 m), holotype female, 11.VIII.2010, D. Curoe col. (MZSP); (600 m), 1 male, 1.VIII.2011, D. Curoe col. (IMQC).

CLYTINI

Placoclytus virgulatus Chemsak & Linsley, 1974

Placoclytus virgulatus Chemsak & Linsley, 1974: 130; Monné, 2017a: 96 (cat.).

Described from Mexico (Michoacán), and recorded from Durango by Monné (2005).

Material examined. MEXICO, *Mexico*: Avandaro (1550 m), male, 10.X.2014, no collector indicated (MZSP).
New state record.

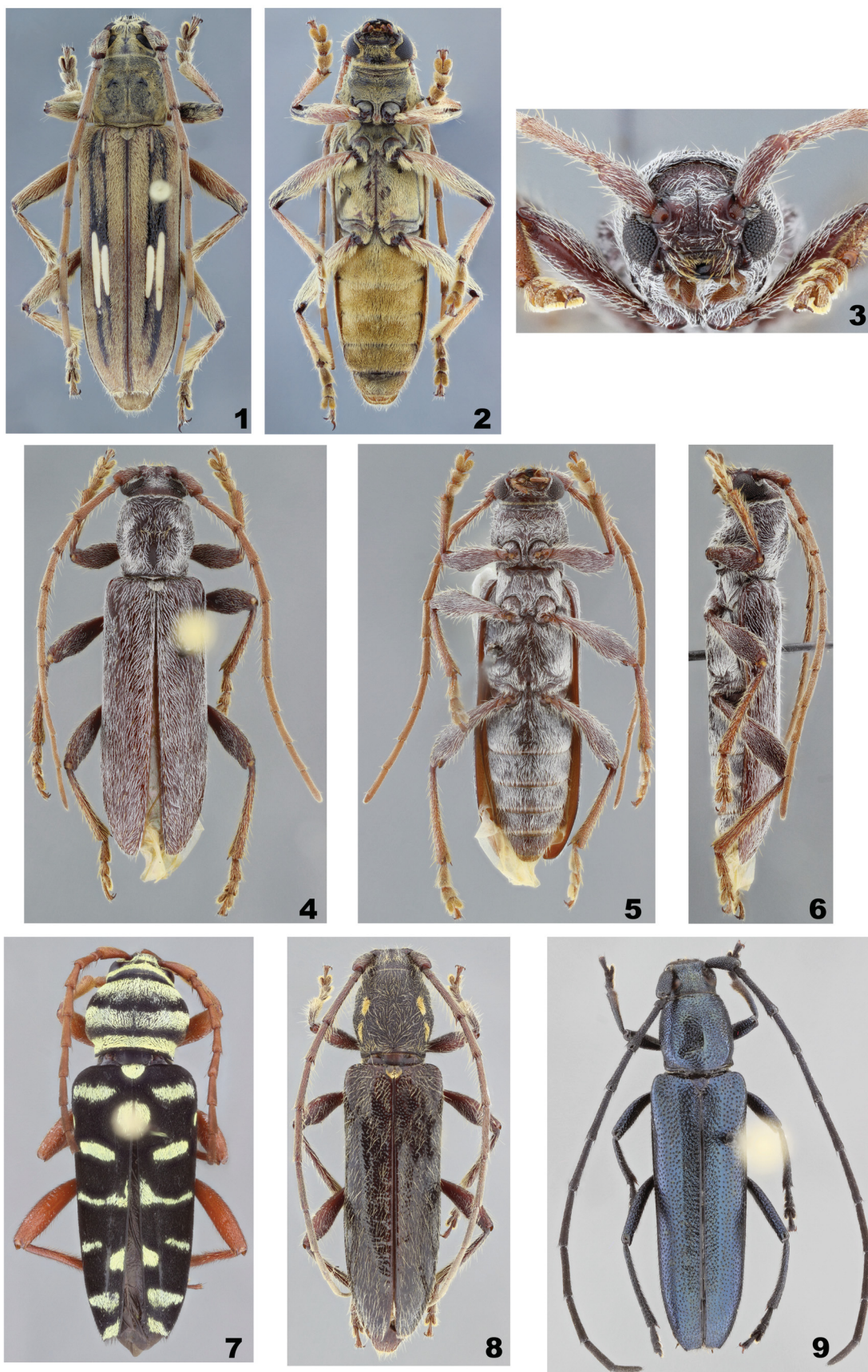
Plagionotus astecus (Chevrolat, 1860)

(Fig. 7)

Clytus (Plagionotus) astecus Chevrolat, 1860: 489.

Plagionotus astecus; Monné, 2017a: 98 (cat.).

Chevrolat (1860) described this species based on three specimens (unknown sex), all from Mexico (without detailed place). Bates (1885) was the first who provided a detailed place in Mexico: Cordova (= Córdoba, Veracruz). Now, *P. astecus* is known from the Mexican states of Jalisco, Veracruz, Guerrero, and Chiapas (Monné 2017a). The syntype figured in Bezark (2017) has the central pubescent band on pronotum interrupted, while in the specimens examined by us it is continuous. However, this is a common variation in species of this genus, as for example, in *P. arcuatus* (Linnaeus, 1758). Chevrolat (1860) reported on the pubescent bands on pronotum (translated): “Pronotum... adorned with three, straight pale yellow pubescent bands, extended toward ventral side.” Thus, the author did not report this variation present, at least, in a syntype.



FIGURES 1–9. 1–2, *Eburia* (*Eburia*) *girouxiae*, male, 1, dorsal habitus, 2, ventral habitus; 3–6, *Anelaphus hirtus*, male; 3, head, frontal view, 4, dorsal habitus, 5, ventral habitus, 6, lateral habitus; 7, *Plagionotus astecus*, male, dorsal habitus; 8, *Anopliomorpha hirsuta*, female, dorsal habitus; 9, *Ischnocnemis cyaneus*, female, dorsal habitus.

Material examined. MEXICO, *Michoacán*: La Tzararacua (1550 m), 3 males, 7–11.XI.2005, no collector indicated (IMQC). **New state record.**

***Trichoxys labyrinthicus* (Chevrolat, 1860)**

Clytus (*Trichoxys*) *labyrinthicus* Chevrolat, 1860: 463.

Trichoxys labyrinthicus; Monné, 2017a: 100 (cat.).

It was described from Mexico (Oaxaca). Currently, it is known from Mexico (Durango, Veracruz, Guerrero, Oaxaca, Chiapas, Jalisco) and Honduras.

Material examined. MEXICO, *Mexico*: Avandaro (1550 m), female, 10.X.2014, no collector indicated (MZSP). **New state record.**

ELAPHIDIINI

***Anelaphus hirtus* Chemsak & Noguera, 2003**

(Figs. 3–6)

Anelaphus hirtus Chemsak & Noguera, 2003: 61; Monné, 2017a: 167 (cat.).

Redescription. Male. Integument mostly dark brown; mouthparts, scape and trochanters dark reddish brown; antennomeres reddish brown; tibiae dark reddish brown basally, gradually lighter toward apex; tarsi reddish brown; distal area of abdominal ventrites I–IV dark reddish brown.

Head. Frons coarsely, densely, confluent punctate except smooth, widely triangular area close to clypeus; with grayish white pubescence not obscuring integument, distinctly longer laterally (more yellowish depending on angle of light source). Area between antennal tubercles with sculpturing and pubescence as on frons. Area from base of upper eye lobes gradually elevated toward prothoracic margin; coarsely, confluent punctate between eyes, gradually finer toward prothoracic margin; with decumbent, moderately long yellowish white setae between eyes (more whitish depending on angle of light source), not obscuring integument, with long, sub-erect yellowish white setae interspersed laterally; remaining surface of vertex nearly glabrous. Area behind upper eye lobes moderately coarsely, abundant, confluent punctate; with a few long, erect, yellowish white setae close to eye; area behind lower eye lobes glabrous, finely rugose-punctate. Genae finely, sparsely punctate except smooth apex; with sparse grayish white pubescence except glabrous apex. Antennal tubercles slightly elevated, somewhat flattened dorsally; moderately coarsely, abundant, confluent punctate except smooth apex (this latter area wider centrally); with sparse grayish white pubescence except glabrous apex. Median groove distinct from clypeus to area between upper eye lobes. Gula smooth, glabrous between prothorax and eyes, coarsely, abundant punctate, with long, erect yellowish white setae between eyes. Last segment of maxillary and labial palpi distinctly securiform. Distance between upper eye lobes 0.73 times length of scape; in frontal view, distance between lower eye lobes 1.08 times length of scape. Antennae 1.4 times elytral length, reaching elytral apex; scape moderately coarsely, densely punctate; with sparse yellowish white pubescence (more whitish depending on angle of light source) interspersed with long, erect yellowish setae; antennomeres with pale yellow not obscuring integument; antennomeres III–X with long, erect pale yellow setae ventrally, gradually shorter, sparser toward X; antennomeres III–VII with spine at inner apex, gradually shorter toward VII. Antennal formula (ratio) based on length of antennomere III (only one measured; excluding apical spines): scape = 0.81; pedicel = 0.21; IV = 0.80; V = 0.85; VI = 0.83; VII = 0.83; VIII = 0.83; IX = 0.80; X = 0.76; XI = 0.98. Length of apical spines of antennomeres compared with greatest width of segment (only one specimen measured): III = 0.83; IV = 0.65; V = 0.53; VI = 0.50; VII = 0.27. Ratio of spines of antennomeres based on length of spine of antennomere III: IV = 0.80; V = 0.60; VI = 0.54; VII = 0.27.

Thorax. Prothorax slightly longer than wide; sides slightly rounded from basal constriction to distal margin. Pronotum with slightly distinct gibbosity on each side after middle; coarsely, abundantly punctate except smooth, subelliptical central area between basal constriction and area near middle; with grayish white pubescence, partially

obscuring integument laterally (especially on each side of basal third), sparser centrally except glabrous smooth area; with long, decumbent yellowish brown setae centrally near middle, and sub-erect, sparse yellowish white setae between base and middle. Sides of prothorax coarsely, moderately abundantly punctate; with grayish white pubescence not obscuring integument interspersed with long, sub-erect yellow setae. Prosternum transversely, widely sulcate at about middle; basal half coarsely, abundantly punctate centrally, finer laterally; area between transverse sulcus and distal margin moderately finely striate-punctate; with grayish white pubescence, distinctly sparser between transverse sulcus and distal margin; with long, erect, sparse yellowish white setae, more abundant between transverse sulcus and distal margin. Prosternal process longitudinally sulcate centrally; with grayish white pubescence not obscuring integument. Mesoventrite with grayish white pubescence not obscuring integument. Mesanepisternum and mesepimeron with dense grayish white pubescence. Mesoventral process without tubercle, deeply emarginated at apex. Metanepisternum with dense grayish white pubescence nearly obscuring integument. Metaventrite moderately coarsely, densely punctate; with grayish white pubescence nearly obscuring integument laterally, gradually sparser toward center. Scutellum with grayish white pubescence obscuring integument. **Elytra.** Coarsely, abundantly punctate on basal half, gradually finer, slightly sparser toward apex; with abundant grayish white pubescence not obscuring integument, interspersed with long, erect grayish white setae; apex truncate, unarmed. **Legs.** Femora coarsely, densely, confluent punctate; with grayish white pubescence not obscuring integument, interspersed with long, erect yellowish setae. Tibiae moderately coarsely, densely punctate; sides carinate from base to near apex; with short and long, erect yellowish setae interspersed with sparse grayish white setae.

Abdomen. Ventrites moderately finely, densely punctate except smooth, narrow distal area of I–IV; with grayish white pubescence partially obscuring integument, except glabrous smooth area. Apex of ventrite V slightly rounded.

Female. Unknown.

Dimensions in mm (males). Total length, 12.65–14.65; prothoracic length, 2.55–3.05; basal prothoracic width, 2.15–2.60; distal prothoracic width, 1.95–2.35; widest prothoracic width, 2.50–3.00; humeral width, 2.90–3.85; elytral length, 8.50–10.40.

Material examined. MEXICO, *Guerrero*: Xalitla (588 m), 3 males, 12.VI.2010, D. Curoe col. (2 IMQC; 1 MZSP); (600 m), 6 males, 1.VIII.2011, D. Curoe col. (5 IMQC; 1 MZSP).

Remarks. *Anelaphus hirtus* is similar to *A. michelbacheri* Linsley, 1942 by the long spine at apex of antennomeres III–IV; antennomere III longer than IV; antennomere IV and V with similar length; pronotum with smooth and glabrous area. In *A. michelbacheri* the spine at apex of antennomeres is shorter and present from III to V, antennomere IV slightly longer than III, antennomere V distinctly longer than IV, and pronotum without smooth and glabrous area. It can be separated from *A. piceus* (Chemsak, 1962) by the long spine at apex of antennomeres III and IV (very small in *A. piceus*), antennomeres V–VII with spine at apex (absent in *A. piceus*), and pronotum with smooth and glabrous area (absent in *A. piceus*). *Anelaphus hirtus* differs from *A. tuckeri* (Casey, 1924) by the antennomeres III–VII with distinct spine at apex (at most, with small spine at antennomere III in *A. tuckeri*), and by the pronotum with smooth and glabrous area (absent in *A. tuckeri*).

The specimens used in this redescription are entirely dark, while the holotype and paratypes are lighter, and the elytra have a longitudinal blackish band. However, there are no morphological differences between the specimens. Furthermore, according to Chemsak & Noguera (2003): “The specimens from the state of Oaxaca [...] are placed into this species, but not paratypical. These have the pubescence shorter, erect hairs less numerous and the elytra lack the vague darker areas on the disk. Structurally they are identical to the type series.” The general pubescence in the specimens studied by us does not differ from that in the female allotype (examined through photographs). The general pubescence in the specimens examined by us is grayish white (white according to the general description). However, the paratype figured in Bezark (2017) has the general pubescence distinctly yellower.

Anopliomorpha Linsley, 1936

Anopliomorpha Linsley, 1936: 465; Monné, 2017a: 173 (cat.).

Linsley (1936) and nearly all posterior authors considered *Anopliomorpha* as being neuter gender. However,

according to Merriam-Webster (2002), the suffix “-morpha” is neuter only when considered plural of “-morphus”: “**-morpha** *n* combining form, *pl* **-morpha** [NL, fr. fem. sing. & neut. pl. of *-morphus* -morphous, fr. Gk *-morphos*]: one or ones having (such) a form <Enteromorpha> -esp. in names of zoological taxa larger than a genus <Cynomorpha> <Hystricomorpha> [NL = New Latin; *n* = noun; *pl* = plural; *fr.* = from; *fem.* = feminine; *sing.* = singular; *neut.* = neuter].”

According to ICZN (1999: Article 11.8): “A genus-group name (see also Article 10.3) must be a word of two or more letters and must be, or be treated as, a noun in the nominative singular.” Therefore, *Anopliomorpha* cannot be considered as being neuter gender. Accordingly, nearly all species currently in this genus need to be corrected to the nominative singular:

A. antennata Chemsak & Noguera, 1993 = no change

A. antillarum (Fisher, 1932) = *A. antillara*

A. gracilis Chemsak & Noguera, 1993 = no change

A. hirsutum (Linsley, 1935) = *A. hirsuta*

A. reticolle (Bates, 1885) = *A. reticollis*

A. rinconium (Casey, 1924) = *A. rinconia*

***Anopliomorpha hirsuta* (Linsley, 1935)**

(Fig. 8)

Anoplium hirsutum Linsley, 1935: 76.

Anopliomorpha hirsutum; Monné, 2017a: 173 (cat.).

Anopliomorpha hirsuta was described based on four specimens from Mexico. Accordingly to Linsley (1935), the holotype is a male, but the sex of the three paratypes was not informed, but at least one of them was considered as female by the author (“antennae slightly longer than the body in both sexes, densely ciliate within, segments three to five spinose at apex.”). We did not examine the holotype or the paratypes, but we believe that the former as well as the paratypes figured in Bezark (2017) are females. The true male of the species, we believe, is that figured in Maes *et al.* (2010: 183), which has the antennae distinctly longer than the body. Furthermore, Linsley pointed out that only the antennomeres III–V have spine at apex. However, the specimen examined by us has spine at apex of the antennomeres III–VII.

Currently, *A. hirsuta* is recorded from Mexico (Sinaloa, Mexico, Morelos), Honduras, Nicaragua and Costa Rica (Monné 2017a).

Material examined. MEXICO, *Guerrero*: Xalitla (588 m), female, 12.VI.2010, D. Curoe col. (IMQC). **New state record.**

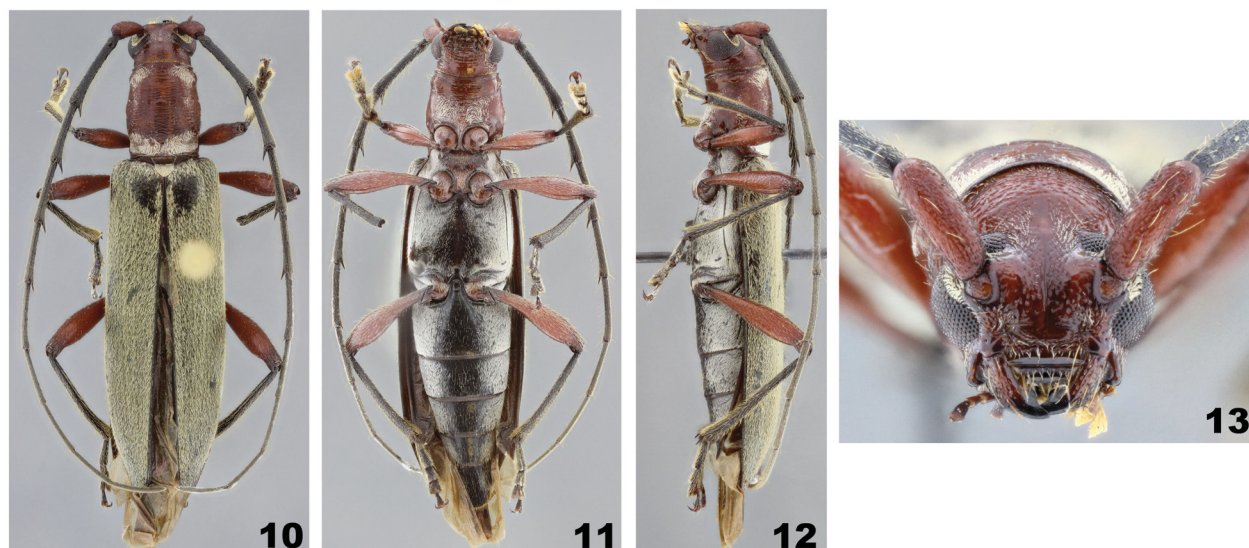
***Ironeus curoei*, sp. nov.**

(Figs. 10–13)

Description. Female. Head, scape, prothorax and femora dark reddish brown, slightly darkened on some areas; mouthparts dark reddish brown except yellowish brown apex of palpomeres; pedicel black; basal antennomeres black, gradually dark brown toward XI; mesoventrite mostly dark reddish brown (darker than on prosternum); mesoventral process dark reddish brown centrally, dark brown laterally; mesanepisternum, mesepimeron, metanepisternum and metaventrite, tibiae and tarsi blackish; elytra black; abdomen black, except slightly reddish distal area of abdominal ventrites I–IV.

Head. Frons widely, rounded carina-shaped laterally, from antennal tubercles to clypeus; moderately coarsely, abundantly punctate except smooth, subtriangular, large central area close to clypeus and nearly smooth area close to lower eye lobes; with short, sparse yellowish white setae laterally. Area between antennal tubercles finely, longitudinally striate-punctate; nearly glabrous. Area between upper eye lobes somewhat finely rugose laterally, smooth centrally; with short, decumbent, abundant yellowish white setae on rugose area, glabrous centrally. Remaining surface of vertex finely, transversely, abundantly rugose; glabrous. Area behind upper eye lobes finely,

transversely, abundantly rugose; glabrous except short yellowish white setae close to eye; area behind lower eye lobes smooth close to eye, rugose close to prothorax; glabrous; area between lower eye lobes and gulamentum with longitudinal yellowish pubescent band. Genae finely, sparsely punctate; with short, sparse yellowish white setae. Antennal tubercles with moderately coarse and sparse punctures (sparser on central area), smooth on distal area; with a few short, decumbent yellowish white setae, glabrous on smooth area. Median groove distinct from clypeus to area between upper eye lobes. Gulamentum smooth glabrous on area between prothorax and eyes, coarsely, transversely striate, with short and long, moderately sparse yellowish setae on area between eyes. Last segment of maxillary and labial palpi slightly widened toward apex, which is obliquely truncate. Galea long, with dense long fringe of golden setae distally. Eyes finely faceted; distance between upper eye lobes 0.56 times length of scape; in frontal view, distance between lower eye lobes equal to length of scape. Antennae 1.8 times elytral length, reaching elytral apex at middle of antennomere IX; scape moderately coarse, abundantly punctate, with short, sparse, decumbent yellowish setae interspersed with long, erect yellowish setae; antennomeres with yellowish white pubescence, gradually denser toward antennomere XI; antennomeres III–VIII with long, erect yellowish brown setae ventrally, shorter, sparser toward VIII; antennomeres IX–X with long, erect yellowish setae distally; antennomeres III–VIII with spine at inner apex, gradually shorter toward VIII. Antennal formula (ratio) based on length of antennomere III (excluding apical spines): scape = 0.56; pedicel = 0.15; IV = 0.85; V = 0.87; VI = 0.85; VII = 0.92; VIII = 0.85; IX = 0.81; X = 0.72; XI = 0.85. Length of apical spines of antennomeres compared with greatest width of segment: III = 0.90; IV = 0.95; V = 0.83; VI = 0.87; VII = 0.43; VIII = 0.21. Ratio of spines of antennomeres based on length of spine of antennomere III: IV = 1.00; V = 0.83; VI = 0.72; VII = 0.33; VIII = 0.14.



FIGURES 10–13, *Ironeus curoei* sp. nov., holotype female, 10, dorsal habitus, 11, ventral habitus, 12, lateral habitus, 13, head, frontal view.

Thorax. Prothorax slightly longer than wide; sides slightly rounded between basal and distal constrictions. Pronotum transversely, abundantly striate throughout, with moderately fine, sparse punctures interspersed; with transverse, wide yellowish white pubescent band at about basal fifth, narrowed centrally, prolonged toward sides of prothorax (more whitish depending on angle of light source); with large yellowish white pubescent macula on each side of distal fifth, not reaching margin, reaching superior area of sides of prothorax, narrowly prolonged toward at about middle (more whitish depending on angle of light source); remaining surface with short, sparse yellowish white setae. Sides of prothorax with longitudinal yellowish white pubescent band, connected to that on base, slightly surpassing middle; remaining surface with short, sparse yellowish white setae, and a few moderately short, erect yellowish setae on distal area. Prosternum transversely depressed centrally; finely, somewhat rugose-punctate on basal half, transversely striate between middle and distal transverse sulcus, subsmooth toward distal margin; with dense yellowish white pubescence on basal half (more whitish depending on angle of light source), slightly less denser centrally, with short, sparse yellowish white setae on distal half. Prosternal process slightly longitudinally sulcate centrally; with short, moderately sparse yellowish white setae. Mesoventrite with yellowish

white pubescence not obscuring integument centrally (more whitish depending on angle of light source), distinctly denser laterally. Mesoventral process longitudinally sulcate at each side of central area; distal margin distinctly emarginate, and sides of apex distinctly projected toward mesocoxa. Mesanepisternum, mesepimeron, metanepisternum and sides of metaventrite with dense yellowish white pubescence (more whitish depending on angle of light source); metaventrite moderately finely and sparsely punctate laterally, smooth centrally; wide central area of metaventrite with sparse yellowish white setae laterally, gradually glabrous toward center. Scutellum with dense yellowish white pubescence. **Elytra.** Moderately finely, abundantly punctate; with nearly golden pubescence obscuring integument (paler depending on angle of light source) except glabrous, irregular area at about basal seventh, starting at level of apex of scutellum, not reaching suture; apex slightly obliquely truncate, unarmed. **Legs.** Femora with short, sparse, decumbent golden setae with long, erect golden setae interspersed. Tibiae laterally carinate; with short and long, erect, sparse golden setae, distinctly denser on distal third of ventral side.

Abdomen. Ventrites with dense yellowish white pubescence laterally, sparser and only centrally on ventrite V; with short, sparse, decumbent yellowish white setae centrally on ventrites I–IV with long, erect golden setae interspersed; ventrite V with moderately short, sparse, erect golden setae; apex of ventrite V almost truncate.

Dimensions in mm. Total length, 16.65; prothoracic length, 3.10; basal prothoracic width, 2.45; distal prothoracic width, 2.20; widest prothoracic width, 2.70; humeral width, 3.70; elytral length, 11.00.

Type material. Holotype male from MEXICO, *Guerrero*: Xalitla (588 m), 12.VI.2010, D. Curoe col. (MZSP).

Etymology. This species is dedicated to Daniel Curoe, our friend who supply us so many interesting beetles over the years.

Remarks. *Ironeus curoei* **sp. nov.** differs from *I. pulcher* Bates, 1880, as follows: integument of head, prothorax, scape and femora dark reddish brown, elytra without longitudinal glabrous bands; elytral apex distinctly wider than distal width of metatibiae. In *I. pulcher*, the integument of head, prothorax, scape and femora is light reddish brown, elytra with distinct glabrous longitudinal bands, and elytral apex about as wide as distal width of metatibiae.

According to Bates (1880) on *I. pulcher*: “Differs from *I. duplex* in the eyes being rather more prominent and more coarsely faceted... The same may be said of the subcylindrical unarmed thorax, the dorsal surface of which is slightly uneven in both species, faintly transverse-strigose in *I. pulcher*, and marked with scattered punctures in *I. duplex*.” However, according to Lingafelter (1998), who listed *I. pulcher* as specimen examined by him: “transverse ridges on pronotal disc absent.” In the same way, it is not possible to include *I. pulcher* and *I. curoei* in the key to genera of Elaphidiini by Lingafelter (1998), alternative of couplet “86”, because they have transverse ridges on pronotum, while in the key *Ironeus* is described as not having them.

Although *I. pulcher* has been recorded from Venezuela by Freude (1954), and from Bolivia by Monné & Giesbert (1994), *Ironeus* was not included in Martins (2005).

***Psyrassa garciai*, sp. nov.**

(Figs. 14–17)

Description. Male. Integument, mostly dark brown, almost black; mouthparts reddish brown; scape reddish brown; remaining antennal segments dark brown, gradually light reddish brown toward antennomere XI; elytra dark brown basally, gradually lighter toward apex; legs reddish brown, darker on tarsomeres; abdominal ventrites I–IV narrowly dark reddish brown on apex.

Head. Frons coarsely, densely punctate laterally, sparsely punctate centrally (finer, notably denser close to lower eye lobes); with short, decumbent yellowish setae laterally (more whitish depending on angle of light source), nearly glabrous centrally; sulcus between frons and clypeus moderately deep. Area between antennal tubercles sparsely punctate laterally, nearly smooth centrally; with sparse yellowish setae laterally, glabrous centrally. Remaining surface of vertex coarsely, abundantly, partially confluent punctate; with short, sparse yellowish setae (more whitish depending on angle of light source), interspersed with a few long, erect yellowish setae. Area behind upper eye lobes coarsely, abundantly punctate toward vertex, smooth toward lower eye lobe; with sparse yellowish decumbent setae on punctate area, glabrous on remaining surface. Area behind lower eye lobes nearly smooth and glabrous. Genae short, finely, moderately abundantly punctate; with short, decumbent,

sparse yellowish setae (more whitish depending on angle of light source); apex rounded. Antennal tubercles coarsely, abundantly punctate frontally, gradually finer, sparser toward vertex, except on smooth distal area; with short, decumbent, sparse yellowish setae except on glabrous distal area. Median groove distinct from clypeus to prothoracic margin (less distinct from upper eye lobes to prothorax). Postclypeus finely, abundantly punctate on wide central area, smooth laterally; with moderately abundant yellowish pubescence not obscuring integument (more whitish depending on angle of light source), glabrous laterally; with a few long, erect yellow setae on each side of wide central area. Labrum coplanar with anteclypeus at basal half, inclined at distal half; with short, sparse yellowish setae interspersed with a few long, erect yellow setae on basal half, with fringe of golden setae on distal half, denser centrally. Gulamentum smooth, glabrous between prothoracic margin and distal margin of lower eye lobes, striate-punctate and with long, erect, sparse yellowish setae on remaining surface. Distance between upper eye lobes 0.83 times length of scape; in frontal view, distance between lower eye lobes 1.10 times length of scape; upper eye lobes with 3 rows of ommatidia. Antennae 1.15 times elytral length, reaching distal sixth of elytra. Scape coarsely, densely punctate dorsally and laterally, except for smooth distal laterodorsal area; nearly smooth ventrally; with short, decumbent, sparse yellowish setae interspersed with long, erect yellowish setae ventrally, except glabrous smooth area; with long, erect, sparse yellowish setae ventrally. Antennomeres with short, decumbent yellowish setae, gradually denser toward XI; with long, erect yellowish setae ventrally, gradually shorter and sparser toward XI; III–X with a few long, erect yellowish setae at apex of dorsal surface; antennomeres III–IV slightly carinate dorsally. Apical spine of antennomere III slightly curved, rounded at apex, with 0.39 times length of antennomere; apical spine of antennomere IV with 0.19 times length of antennomere; antennomere V with short triangular projection at inner apex. Antennal formula (ratio) based on length of antennomere III (excluding spine): scape = 0.78; pedicel = 0.26; IV = 0.78; V = 0.82; VI = 0.82; VII = 0.80; VIII = 0.78; IX = 0.76; X = 0.65; XI = 0.76.

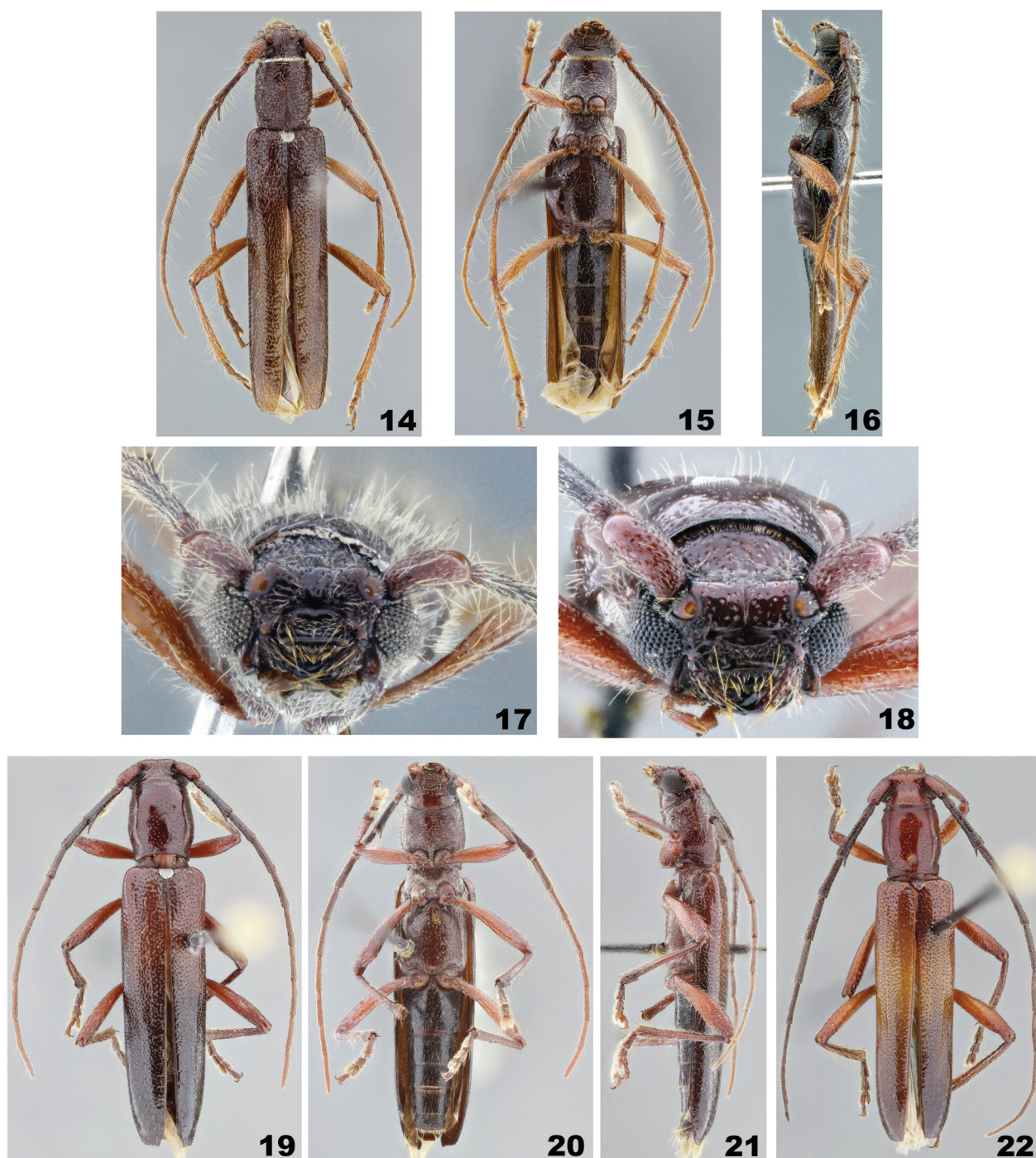
Thorax. Prothorax longer than wide (1.2 times); parallel-sided between basal and distal constrictions. Pronotum coarsely, abundantly punctate except smooth central area from basal constriction to distal third (narrowed from base to apex); with short and long, erect, moderately sparse yellowish setae throughout (more whitish depending on angle of light source), except glabrous smooth area. Sides of prothorax coarsely, abundantly punctate (punctures slightly denser than on pronotum), except striate basal and distal areas (the latter narrowed toward pronotum); with short and long, erect yellowish setae, sparser toward prosternum. Prosternum rugose-punctate on basal half, transversely striate on distal half; with grayish white pubescence on basal half (more yellowish depending on angle of light source), not obscuring integument, interspersed with long, erect yellowish setae; with long, erect, sparse yellowish setae on distal half; prosternal process narrowed centrally, triangularly expanded toward apex. Procoxal cavities open posteriorly. Mesoventrite with sparse grayish white pubescence centrally (more yellowish depending on angle of light source), denser laterally. Mesanepisternum and mesepimeron with grayish white pubescence nearly obscuring integument (more yellowish depending on angle of light source). Metanepisternum with grayish white pubescence partially obscuring integument (more yellowish depending on angle of light source). Metaventricle coarsely, moderately abundantly punctate except for smooth central area; sides with grayish white pubescence not obscuring integument (more yellowish depending on angle of light source); remaining surface with long, erect, sparse yellowish setae except glabrous central area. Scutellum with grayish white pubescence obscuring integument. **Elytra.** Parallel-sided; apex truncate, with rounded outer angle and triangular projection at sutural angle; coarsely, abundantly punctate on basal half, gradually finer sparser toward apex; with short, decumbent, moderately abundant yellowish setae interspersed with long, erect yellowish setae. **Legs.** Femora gradually coarsely, densely, confluent punctate toward apex; with short and long, erect, sparse yellowish setae. Tibiae with short and long, erect, moderately sparse yellowish setae.

Abdomen. Ventrites I–IV finely, moderately sparsely punctate; with short and long, erect, sparse yellowish setae on wide central area, with short, dense grayish white pubescence laterally. Ventricle V nearly smooth, with short and long, sparse yellowish setae; distal margin truncate.

Dimensions in mm. Total length, 10.85; prothoracic length, 1.90; basal prothoracic width, 1.45; distal prothoracic width, 1.40; widest prothoracic width, 1.55; humeral width, 2.15; elytral length, 7.90.

Type material. Holotype male from MEXICO, *Tamaulipas*: Aldama (Sabino Gordo; 100 m), 22–25.VIII.2009, Curoe & Fierro col. (MZSP).

Etymology. This species is dedicated to our collaborator Jose Hector Garcia.



FIGURES 14–22. 14–17, *Psyrassa garciai* sp. nov., holotype male, 14, dorsal habitus, 15, ventral habitus, 16, lateral habitus, 17, head, frontal view; 18–22, *Psyrassa belangeri* sp. nov., 18–21, holotype female, 18, head, frontal view, 19, dorsal habitus, 20, ventral habitus, 21, lateral habitus; 22, paratype male, dorsal habitus.

Remarks. The inclusion of the new species among the genera of Elaphidiini is somewhat problematic. It may be included in *Psyrassa* Pascoe, 1866, *Megapsyrassa* Linsley, 1961, and *Aneflomorpha* Casey, 1912, depending of the feature or set of features used. Lingafelter (1998) pointed out: “*Aneflomorpha* strongly resembles *Psyrassa*; indeed the two genera share many characters. In particular, wing venation is identical. Both of these genera are speciose and probably are polyphyletic; each containing some taxa that should belong in the other. The lack of a strong pronotal constriction, more heavily punctate and pubescent pronotum, general openness of the procoxal

cavities posteriorly, and longer third antennomere in *Aneflomorpha* distinguish it from *Psyrrassa*.” We agree that these genera are problematic and their currently definitions are not satisfactory. However, we are considering as distinctive the presence of decumbent and abundant setae on pronotum and elytra in *Aneflomorpha* as a feature differing it from *Psyrrassa*. In the latter, when the setae are more or less abundant, they are erected. Furthermore, the basal pronotal constriction is present in both these genera. Linsley (1961) separated *Megapsyrrassa* from *Psyrrassa* in the alternative of couplet “18”: “Episterna of metasternum not covered by elytra—leading to *Psyrrassa* / Episterna of metasternum very narrow, covered by elytra, except toward base... *Megapsyrrassa*.” Still according to Linsley (1961) on *Megapsyrrassa*: “The affinities of this genus are not clear. It should probably be placed next to *Psyrrassa*, from which it differs in the extremely narrow metathoracic episterna, the unusually heavy, recurved spines of the third and fourth antennal segments (in *Psyrrassa* the spines are nearly always slender and that of the third segment is usually disproportionately long) and the large size of the included species.” However, the spines of the basal antennomeres do not differ from those of many species placed in *Psyrrassa*. Furthermore, the metanepisternum in most species currently placed in *Megapsyrrassa* does not differ from that in the species of *Psyrrassa*. In *M. linsleyi* Chemsak & Giesbert, 1986, the metanepisternum is not hidden by the elytra, being as in nearly all species of *Psyrrassa*; in *M. atkinsoni* Chemsak & Giesbert, 1986, the metanepisternum is hidden by the elytra, but usually not so much as in *M. xestioides* (Bates, 1872), type species of *Megapsyrrassa*; in *M. testacea* Giesbert, 1993, the metanepisternum is from slightly hidden by the elytra toward apex to entirely not hidden as in *Psyrrassa*; and in *M. xestioides*, the metanepisternum is visible only anteriorly, but the length of this visible area is variable, and can be somewhat long. Even the large size of the species included in *Megapsyrrassa* is questionable as a distinctly feature between this genus and *Psyrrassa*, since *P. olegkozlovi* Santos-Silva *et al.*, 2017 is a somewhat large species (23.6 mm). Based on the problematic distinction between *Psyrrassa*, *Megapsyrrassa* and *Aneflomorpha*, we are describing the new species in *Psyrrassa*, the oldest genus that already includes species with similar appearance.

Psyrrassa garciai sp. nov. is slightly similar to *P. aliena* (Linsley, 1934), especially by the prothorax and elytra parallel-sided, but differs by the longer antennomere III, apex of spine of antennomere III rounded (acute in *P. aliena*), and outer angle of the elytra rounded (projected in *P. aliena*).

***Psyrrassa belangeri*, sp. nov.**

(Figs. 18–22)

Description. Female. Integument mostly dark reddish brown, in some areas almost brown or slightly lighter depending on angle of light source; scape reddish brown; basal antennomeres black, gradually reddish brown toward XI; elytra dark reddish brown at about basal half, black on remaining surface; femora reddish brown; tibiae mostly reddish brown with dark areas; tarsomeres I–II dark brown and tarsomeres III–V mostly reddish brown; abdomen black except reddish narrow distal area of ventrites I–IV.

Head. Frontal plate smooth; remaining surface of frons finely, sparsely punctate, except area close to lower eye lobes with dense punctures; with minute, sparse yellowish white setae. Vertex distinctly depressed between antennal tubercles and upper eye lobes, then gradually elevated toward prothoracic margin; finely, sparsely punctate between antennal tubercles, coarsely, moderately sparsely punctate between upper eye lobes and prothoracic margin; with minute, sparse yellowish white setae interspersed with a few long, erect, yellowish setae close to eyes. Area behind upper eye lobes coarsely, moderately abundantly punctate; glabrous. Area behind lower eye lobes nearly smooth, glabrous. Genae short (anterior margin of lower eye lobe almost touching middle distal margin), finely, abundantly punctate close to eye, smooth toward apex; with short, sparse yellowish setae close to eye, glabrous toward rounded apex. Antennal tubercles finely, sparsely punctate except smooth apex; with minute, sparse yellowish white setae except on glabrous apex. Median groove distinct from clypeus to near prothoracic margin. Postclypeus finely, abundantly, shallowly punctate on wide central area, smooth laterally; with minute, sparse yellowish white setae on punctate area; with long, erect yellow seta on each side of punctate area. Labrum coplanar with anteclypeus at basal 2/3, slightly concave toward apex centrally, inclined at distal third; with minute, sparse yellowish white setae interspersed with long, erect golden setae. Gula smooth, glabrous between prothoracic margin and distal margin of lower eye lobes, striate-punctate and with long, erect, sparse yellowish white setae on remaining surface. Distance between upper eye lobes 0.83 times length of scape; in frontal view, distance between lower eye lobes equal to length of scape; upper eye lobes with 3 rows of ommatidia. Antennae

1.35 times elytral length, reaching elytral apex at apex of antennomere XI. Scape coarsely, confluent punctate dorsally and laterally, except for smooth distal laterodorsal area; with short, sparse yellowish white setae, interspersed with a few long, erect setae ventrally and laterally. Antennomeres with short yellowish pubescence, gradually denser toward XI; with long, erect yellowish setae ventrally on III–X; III–X with a few long, erect yellowish setae at apex of dorsal surface; antennomeres III–VII dorsally carinate (gradually less distinct toward VII). Apical spine of antennomere III straight, acute at apex, with 0.28 times length of antennomere; apical spine of antennomere IV with 0.12 times length of antennomere; remaining antennomeres with unarmed apex. Antennal formula (ratio) based on length of antennomere III (excluding spine): scape = 0.75; pedicel = 0.20; IV = 0.78; V = 0.78; VI = 0.83; VII = 0.84; VIII = 0.79; IX = 0.78; X = 0.70; XI = 0.86.

Thorax. Prothorax longer than wide (1.15 times); sides slightly rounded between basal and distal constrictions. Pronotum finely, sparsely punctate interspersed with some coarse punctures, except on smooth central area between basal constriction and middle; with short, sparse, erect yellowish setae, slightly longer and more abundant laterally, except glabrous smooth area. Sides of prothorax moderately coarsely, sparsely punctate close to pronotum, distinctly denser toward prosternum, except transversely striate basal area and striate punctate distal area (punctures sparse); with long, erect, sparse yellowish setae except on glabrous basal area. Prosternum slightly striate-punctate on basal half, transversely striate on distal half; with grayish white pubescence on basal half, not obscuring integument, interspersed with a few long, erect yellowish setae; with short and long, erect, sparse yellowish setae on distal half; prosternal process gradually narrowed toward distal third, then distinctly widened. Procoxal cavities open posteriorly. Mesoventrite depressed centrally; with sparse grayish white pubescence centrally, denser laterally. Mesanepisternum, mesepimeron and metanepisternum with dense grayish white pubescence. Metaventrite coarsely, moderately sparsely punctate; with narrow grayish white pubescent band close to metanepisternum and mesocoxal cavity, with sparse, erect yellowish setae on remaining surface. Scutellum with grayish white pubescence obscuring integument. **Elytra.** Slightly, gradually narrowed toward apex; apex truncate, with rounded outer angle and with triangular projection at sutural angle; coarsely, abundantly punctate except nearly smooth distal seventh; with long, erect, sparse yellowish setae throughout. **Legs.** Femora coarsely, abundantly punctate, gradually coarser, confluent toward apex; with long, erect, sparse golden setae. Tibiae with long, erect golden setae, distinctly denser ventrally toward apex.

Abdomen. Ventrites I–IV finely, moderately sparsely punctate; with short and long, erect, sparse yellowish setae on wide central area, with short, moderately dense grayish white pubescence laterally. Ventrite V finely, sparsely punctate (punctures finer than on remaining ventrites), with short and long, sparse yellowish setae; distal margin slightly rounded.

Male. General integument in both paratypes is more reddish; in one paratype the metanepisternum is reddish brown with sides black; in both paratypes the head has black areas; in one paratype the basal antennomeres are dark reddish brown; in both paratypes the tarsi are mostly dark reddish brown and the basal area of the elytra is notably contrasting with dark distal area, which is dark brown in one paratype. Sutural apex of elytra without distinct projection. Antennae 1.6 times elytral length, reaching elytral apex at middle of antennomere X; antennomere V with spicule at inner apex in one paratype. Distal margin of abdominal ventrite V slightly, widely concave.

Dimensions in mm (holotype female/paratype males). Total length, 12.70/12.45–14.55; prothoracic length, 2.55/2.35–2.90; basal prothoracic width, 1.90/1.75–2.10; distal prothoracic width, 1.90/1.75–2.05; widest prothoracic width, 2.25/2.00–2.35; humeral width, 2.75/2.55–3.00; elytral length, 9.40/8.80–10.10.

Type material. Holotype female from MEXICO, Guerrero: Xalitla (588 m), 12.VI.2010, D. Curoe col. (MZSP). Paratypes—1 male, same data as holotype except 600 m, 1.VIII.2011 (IMQC); 1 male, same data as holotype except 590 m, 11.VIII.2010 (MZSP).

Etymology. This species is dedicated to our collaborator Pierre Bélanger.

Remarks. The general appearance of *P. belangeri* sp. nov. resembles that of several species of the genus. However, it differs from the species with spine of the antennomere III acute at apex, and with procoxal cavities open behind. It differs from *P. ebenina* Linsley, 1935, and *P. levicollis* Chemsak & Noguera, 1993, by the upper eye lobes with 3 rows of ommatidia (5 in *P. ebenina* and *P. levicollis*), elytra not pubescent (pubescent in *P. ebenina* and *P. levicollis*), and elytral apex rounded at outer angle (spiniform in *P. ebenina* and *P. levicollis*); it differs from *P. oaxacae* Toledo, 2002, by the spine of antennomere III about as long as pedicel (almost 2 times length of pedicel in *P. oaxacae*); outer elytra apex rounded (projected in *P. oaxacae*), and antennae in male surpassing elytral apex (not reaching in *P. oaxacae*). It can be separate from *P. unicolor* (Randall, 1838) by the dark color (light in *P. unicolor*), and by the elytral apex not spiniform at outer angle (spiniform in *P. unicolor*).

HESPEROPHANINI

Osmidus guttatus LeConte, 1873

Osmidus guttatus LeConte, 1873: 178; Monné, 2017a: 342 (cat.).

Osmidus obscurellus Casey, 1924: 255.

Osmidus vestitus Casey, 1924: 255.

Osmidus guttatus was described from Mexico (Baja California Sur), and Casey's junior synonyms were both described from the USA (Arizona). Currently the species is known from USA (California, Arizona, Nevada) and Mexico (Baja California Sur, Sonora, Oaxaca). The Mexican state of the type locality of *O. guttatus* has been incorrectly registered as Baja California. However, the type locality, Cape San Lucas, is in Baja California Sur.

Material examined. MEXICO, *Guerrero*: Xalitla (600 m), male, 18.XII.2012, D. Curoe col. (MZSP).

Makromastax, gen. nov.

Type species: *Haplidus mandibularis* Chemsak & Linsley, 1963, monotypy, present designation.

Etymology. A compound of the Greek μακρός (*makrós*, “long”) + μαστάξ (*mástax*, “jaws”); refers to the long and falciform mandibles in males, the more conspicuous characteristic of the new genus. Feminine gender.

Description. Body flattened; head prognathous; frons moderately short, transverse, nearly vertical; antennal tubercles slightly elevate with rounded apex; palpi slender, maxillary palpi long, almost reaching apex of mandible (when closed) in male, surpassing in female; labial palpi distinctly shorter than maxillary palpi; postclypeus large, nearly perpendicular to frons, flap-shaped, entirely hiding labrum in dorsal view. Mandibles in male falciform, distinctly longer than half of head, apex bifid, superior margin of inner side carinate, ending abruptly near apex, inner surface excavated, inferior inner margin with large tooth before middle, outer side without tooth; in female with similar general appearance, but distinctly shorter. Upper eye lobes with 5 rows of ommatidia at its maximum width; distance between them equal to about 4 times width of a lobe in male, slightly shorter in female. Antennae 11-segmented, slightly longer than body in male, about as long as body in female; scape elongate, slightly, gradually widened toward apex; antennomeres without apical spicule; antennomere III not carinate dorsally, longer than IV, shorter than scape; basal antennomeres with long, erect, sparse setae ventrally. Prothorax distinctly wider than long; sides broadly rounded, unarmed. Pronotum without gibbosities. Prosternal process gradually narrowed toward apex. Procoxal cavities widely open laterally. Mesoventral process slightly narrowed toward apex; apex without lateral lobes. Elytra parallel-sided, not carinate; apex rounded, unarmed. Femora fusiform, slightly pedunculate basally in meso- and metafemora. Tibia not carinate laterally. Metatarsomere I about 1.5 times II–III together. Abdominal ventrites with pubescence not obscuring integument.

Remarks. *Makromastax* gen. nov. differs from all other American Hesperophanini by the long and falciform mandibles in male. Chemsak and Linsley (1963) provided a key to Mexican genera of Hesperophanini, but including genera currently placed in other tribes (*Eburia* Lacordaire, 1830, and *Eburodacrys* White, 1853, Eburini; *Chlorida* Audinet-Serville, 1834, Bothriospilini; *Amphelictus* Bates, 1884, Cerambycini). Two other genera were described after Chemsak and Linsley (1963): *Megosmidus* Hovore, 1988, and *Oraphanes* Chemsak and Linsley, 1984.

Key to Mexican genera of Hesperophanini (adapted from Chemsak and Linsley 1984)

1. Femora strongly clavate 2
- Femora not or at most feebly clavate 3
- 2(1). Pronotum with sides rounded, disk flat, with at most a small, post-median smooth callus; palpi very unequal, apex almost securiform; antennae 11-segmented *Austranoplium* Chemsak and Linsley, 1963
- Pronotum with sides angulate or feebly tuberculate, disc irregular, with three elevated calli; maxillary palpi only slightly longer than labial; antennae 12-segmented *Malobidion* Schaeffer, 1908
- 3(1). Pronotum tuberculate at sides 4

-	Pronotum rounded or sinuate at sides, not tuberculate nor spinose.	7
4(3).	Basal antennomeres spinose at apex	5
-	Basal antennomeres not spinose at apex	6
5(4).	Elytra without small, rounded glabrous spots	<i>Eucrossus</i> LeConte, 1873
-	Elytra with small, rounded glabrous spots	<i>Megosmidus</i> Hovore, 1988
6(4).	Elytra with sparsely scattered shining punctures	<i>Perilasius</i> Bates, 1880
-	Elytra without scattered shining punctures	<i>Oraphanes</i> Chemsak and Linsley, 1984
7(3).	Vestiture of elytra dense except for small glabrous spots	8
-	Vestiture of elytra sparse to dense, or condensed	10
8(7).	Pronotum without prominent, elevated, glabrous discal callosities; elytra not granulate.	<i>Osmidus</i> LeConte, 1873
-	Pronotum with prominent, elevated, glabrous discal callosities; elytra granulate basally or denuded spots raised.	9
9(8).	Third antennal segment distinctly sulcate dorsally; antennae of male elongate, exceeding elytral apex by four segments; sutural angle of elytra dentate; elytra not irregularly granulate at base at most with glabrous raised spots.	<i>Perilasius</i> Bates, 1880
-	Third antennal segment not sulcate dorsally; antennae of male extending only about two segments beyond elytral apices; apices of elytra unarmed; elytra granulate basally.	<i>Brothylus</i> LeConte, 1859
10(7).	Antennae short, not or barely extending beyond middle of elytra; pronotum coarsely alveolate-punctate or not, without discal calli	<i>Anatinomma</i> Bates, 1892
-	Antennae elongate, extending beyond middle of elytra; pronotum finely to coarsely punctate, or asperate, not densely alveolate-punctate, discal callosities present	11
11(10).	Scape strongly, irregularly compressed at basal half	<i>Austrophanes</i> Chemsak and Linsley, 1963
-	Scape not compressed	12
12(11).	Pubescence condensed into patches on pronotum and elytra; pronotum granulate-punctate	<i>Cacophrissus</i> Bates, 1885
-	Pubescence not condensed into patches on pronotum and elytra; pronotum not granulate-punctate	13
13(12).	Palpi with apical segments expanded; disk of pronotum with round, elevated calli	<i>Xeranoplum</i> Linsley, 1957
-	Palpi with apical segments not expanded; disk of pronotum without round, elevated calli	14
14(13).	Antennae in males notably surpassing elytral apex; tibiae carinate laterally; apices of elytra with spine at sutural angle	<i>Heteraneplus</i> Chemsak and Linsley, 1963
-	Antennae in males, at most, slightly surpassing elytral apex; tibiae not carinate laterally; apices of elytra without apical spines	15
15(14).	Mandibles in male long, falciform; head, including eyes, about as wide as humeral width	<i>Makromastax</i> gen. nov.
-	Mandibles in male short, not falciform; head, including eyes, narrower than humeral width, but if with similar width, body distinctly slender	<i>Haplidus</i> LeConte, 1873

Obs.¹: *Osmidus vestitus* Casey, 1924, apparently it is not equal to *O. guttatus* LeConte, 1873, since the holotype has small, but distinct spine at apex of antennomere III. Thus, the specimen is aberrant to the present key.

Obs.²: Certainly, *Haplidus* (even excluding *M. mandibularis*) is not a monophyletic genus, including species with different general appearance, head shape, antennal length, tarsal shape, etc.

***Makromastax mandibularis* (Chemsak & Linsley, 1963), comb. nov.**

(Figs. 23–31)

Haplidus mandibularis Chemsak and Linsley, 1963: 229; Monné, 2017a: 239 (cat.).

Haplidus nitidus Chemsak and Linsley, 1963: 228; Monné, 2017a: 239 (cat.). **Syn. nov.**

Chemsak and Linsley (1963) described *Haplidus nitidus* and *H. mandibularis* in the same work, and both species from Mexico, respectively: Morelos and Puebla. Still according to them, *H. mandibularis* differs from *H. nitidus* by the prominent, bifid mandibles, narrower pronotum, and shorter antennal scape. However, the mandibles in *H. mandibularis* are very similar, although distinct longer in male, and the scape is also very similar in shape and length in both species. The difference in the proportions between scape and antennomere III reported in these species, is a common sexual dimorphism (scape longer than third segment [*H. nitidus*]; scape subequal in length to third segment [*H. mandibularis*]). The same regarding the prothoracic shape.

Based in the original descriptions, examination of photographs of the holotypes of both species, and detailed exam of a male, we concluded that *H. mandibularis* is the male of *H. nitidus*. As *H. mandibularis* and *H. nitidus* were described in the same work (Chemsak and Linsley 1963) and the Principle of Priority does not apply (ICZN 1999: Article 24.2.2), we chose *Haplidus mandibularis* as the valid name because is in the males that the mandibles are long and falciform, the more conspicuous characteristic of the genus. After the original descriptions, these species were only mentioned in checklists and catalogues.

Material examined. MEXICO, *Guerrero*: Xalitla (600 m), 1 male, 1.VIII.2011, D. Curoe col. (MZSP). **New state record.**

NEOIBIDIONINI

Neocompsa intricata Martins, 1970

Neocompsa intricata Martins, 1970: 1088; Monné, 2017a: 337 (cat.).

The species was originally described from Mexico (Veracruz). Schaeffer (1905, 1908) recorded *Neocompsa textilis* (Thomson, 1865) from Texas, and Linsley & Martin (1933) described *N. textilis* var. *alacre* (written as *alacris*) also from Texas. The specimens used to record *N. textilis* and *N. textilis alacris* from the USA have been considered as belonging to *N. intricata*. Without doubt, this supposition was based in Martins (1970) (translated): “The specimens from Brownsville, Texas, and from Hidalgo in Mexico, appear to belong to this species [*N. intricata*]; however, the elytral apex is less projected at outer side and the erect setae of the elytra are more abundant. They will not be included in the type series.” Evidently, this is not a formal affirmation (“appear”). Thus, it is a mistake to list these specimens in the references of *N. intricata*. Currently, *N. textilis* var. *alacre* is *N. alacris* (Bates, 1885).

According to Monné (2017a), *N. intricata* is recorded from the USA (Texas), Mexico (San Luis Potosí, Veracruz). However, as seen before, for the time being, the species is formally excluded from the fauna of the USA.

Material examined. MEXICO, *Hidalgo*: Molango (1650 m), male, 9.VII.1989, D. Curoe col. (IMQC).

TRACHYDERINI

Ischnocnemis cyaneus Bates, 1892

(Fig. 9)

Ischnocnemis cyaneus Bates, 1892: 178; Monné, 2017a: 552 (cat.).

It was originally described and remains known from Mexico (Morelos). After the original description, the species was only mentioned in catalogues and checklists.

Material examined. MEXICO, *Oaxaca*: La Luna (San Pedro Juchatengo, 110 m), 2 females, IX.2017, D. Curoe col. (IMQC, MZSP). **New state record.**

Lophalia cyanicollis (Dupont, 1838)

Sphaenothecus cyanicollis Dupont, 1838: 59.

Lophalia cyanicollis; Monné, 2017a: 554 (cat.).

Sphaenothecus cyanicollis was described from Mexico, without a detailed locality. LeConte (1858) recorded the species from the USA (Texas), and Bates (1885) was the first recording detailed places in Mexico: Veracruz and Almolonga. According to Selander and Vaurie (1962) on these two places: “ALMOLONGA, VERACRUZ, Mexico. Town in central Veracruz 16 km. northeast of Jalapa; 2500± feet; 19°36', 96°47'.”; and “VERACRUZ, MEXICO. As used in the “Biologia,” the name Veracruz probably usually refers to the Atlantic port and largest city in the state of Veracruz (19°12', 96°08'). In a few places either the city or the state is specified.”

Currently the species is known from the USA (Arizona, Texas), Mexico (Mexico, Veracruz, Chiapas, Puebla, Tamaulipas).

Material examined. MEXICO, *Oaxaca*: La Luna (San Pedro Juchatengo, 110 m), female, IX.2017, D. Curoe col. (IMQC). **New state record.**



FIGURES 23–31, *Makromastax mandibularis*, comb. nov. 23–26, male, 23, dorsal habitus, 24, ventral habitus, 25, lateral habitus, 26, head, frontal view; 27, *Haplidus mandibularis*, holotype male, head, frontal view; 28–30, *Haplidus nitidus*, holotype female, 28, head, frontal view, 29, dorsal habitus, 30, ventral habitus; 31, *Haplidus mandibularis*, holotype male, ventral habitus.

LAMIINAE

Acanthoderini

Acanthoderes (Acanthoderes) barrerai Chemsak & Hovore, 2002 (Figs. 32–36)

Acanthoderes barrerai Chemsak & Hovore, 2002: 13.

Acanthoderes (Acanthoderes) barrerai; Monné, 2017b: 137 (cat.).

It was described from Mexico (Querétaro and Hidalgo), based on two males and two females. The female from Veracruz examined by us (Figs 35–36) agrees very well with the original description and general appearance of the holotype male (Figs 32–34).

Material examined. MEXICO, *Veracruz*: Los Tuxtlas (900 m), 1 female, 1–15.VI.2016, J. H. Garcia col. (MZSP). **New state record.**

Acanthoderes (Acanthoderes) ferruginea Chemsak & Hovore, 2002

Acanthoderes ferruginea Chemsak & Hovore, 2002: 20.

Acanthoderes (Acanthoderes) ferruginea; Monné, 2017b: 137 (cat.).

It was originally described and remains known only from Guatemala.

Material examined. MEXICO, *Veracruz*: Los Tuxtlas (900 m), male, 1–15.VI.2016, J.H. Garcia col. (MZSP). **New country record.**

Acanthoderes (Pardalisia) funeraria Bates, 1861

Acanthoderes funerarius Bates, 1861: 151.

Acanthoderes (Pardalisia) funeraria; Monné, 2017b: 140 (cat.).

Myoxomorpha erichsonii Thomson, 1868: 147.

Acanthoderes funeraria was described from Mexico (no detailed place informed), based on males and females. Thomson (1868) described *Myoxomorpha erichsonii* based on a single specimen also from Mexico (without detailed place). Bates (1880) considered *M. erichsonii* as a variety of *A. funeraria*, and thus, established the synonymy between both species. Currently the species is only recorded from Mexico (Oaxaca, San Luís Potosí, Veracruz, Michoacán, Hidalgo) (Monné 2017b).

Material examined. MEXICO, *Puebla*: Cuacnopalan (2260 m), 1 female, 24–27.V.2009, D. Curoe col. (IMQC). **New state record.**

HEMILOPHINI

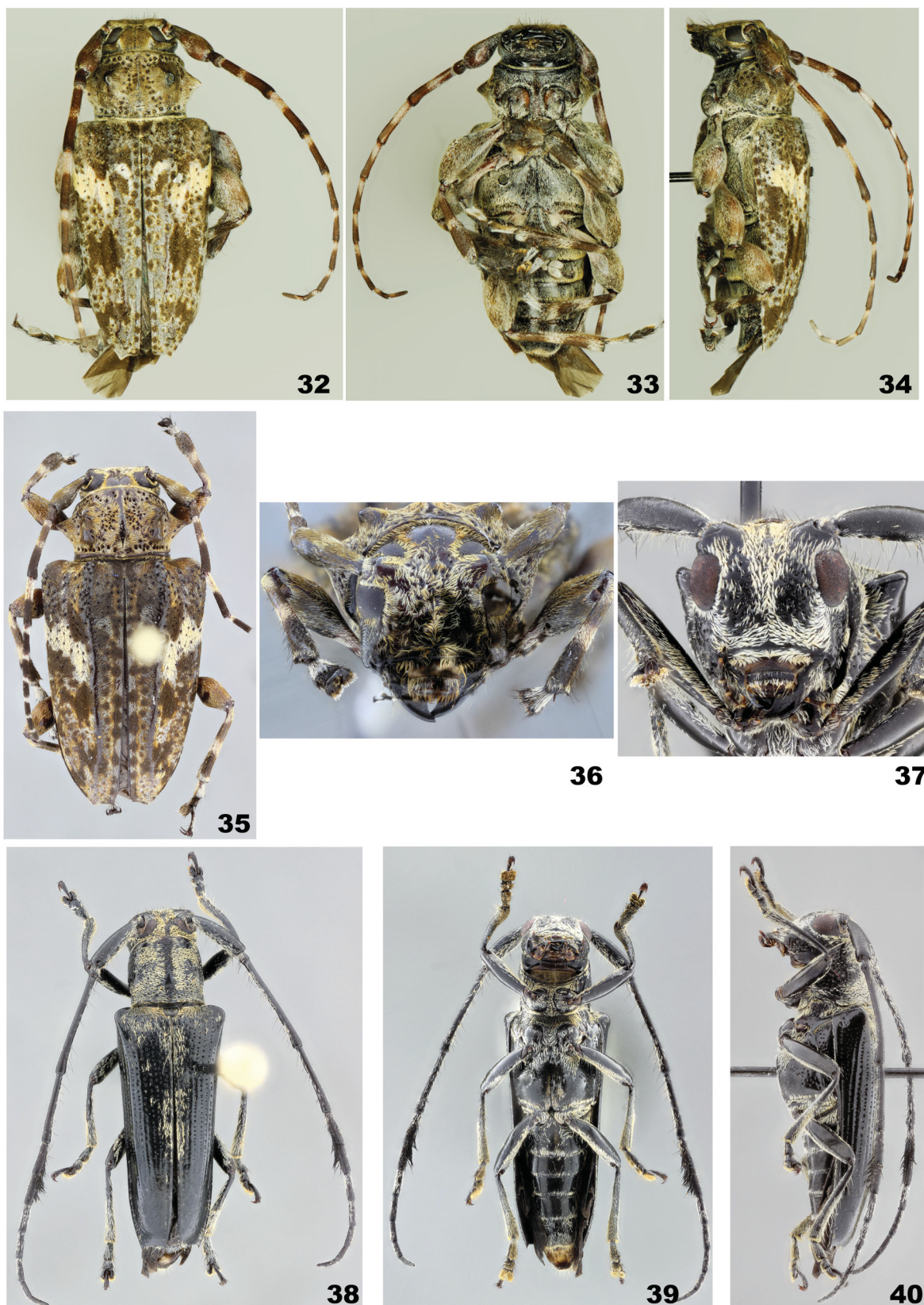
Cirrhicera bankoi, sp. nov. (Figs. 37–40)

Description. Male. Integument black except dark reddish brown areas of mouthparts.

Head. Dorsal surface densely micropunctate. Frons coarsely, moderately abundantly punctate; with yellowish white pubescence (white depending on angle of light source) obscuring integument, except large, subelliptical area with sparse pubescence on each side; with sparse, erect, moderately short dark setae (slightly more abundant toward antennal tubercles). Area between antennal tubercles and prothoracic margin coarsely, moderately abundantly punctate, except nearly smooth, longitudinal central area; with yellowish brown pubescence obscuring integument (denser toward prothorax), except glabrous smooth area; with sparse, erect, moderately short dark

setae. Area behind upper eye lobes coarsely, moderately abundantly punctate; with yellowish brown pubescence nearly obscuring integument, centrally projected toward area behind lower eye lobe. Area behind lower eye lobes coarsely, moderately abundantly punctate; with pubescent band close to eye, yellowish brown toward upper eye lobes, yellowish white toward gena; remaining surface nearly glabrous, except band with sparse pubescence close to prothorax. Genae coarsely, moderately sparsely punctate except smooth apex; with yellowish white pubescent band close to lower eye lobe, another longitudinal close to clypeus and frons, very sparsely pubescent on remaining surface, except on glabrous apex. Antennal tubercles only micropunctate; with yellowish white pubescence on base (slightly more yellowish toward upper eye lobes), glabrous on remaining surface. Median groove distinct from clypeus to prothoracic margin. Gula mentum smooth, glabrous except a few short yellowish white setae close to anterior elevated area. Mandibles with yellowish white pubescence on basal half of outer side, glabrous on remaining surface. Postclypeus with transverse, glabrous band close to frons, with dense yellowish white pubescence close to anteclypeus (more white depending on angle of light source). Labrum coplanar with anteclypeus at basal third, inclined at distal 2/3; basal third nearly glabrous; base of inclined area with transverse yellowish white pubescent band, interspersed with long, erect golden setae; remaining surface of inclined area nearly glabrous. Distance between upper eye lobes 0.26 times length of scape (2.0 times width of one upper eye lobe); in frontal view, distance between lower eye lobes 0.65 times length of scape. Antennae 1.8 times elytral length, reaching elytral apex at distal quarter of antennomere VII. Scape nearly glabrous dorsally and on outer side, with yellowish white pubescence ventrally and on inner side, interspersed with yellowish brown pubescence; with long, erect, sparse golden setae on pubescent area, interspersed with a few dark setae. Pedicel with yellowish white pubescent ring on basal half (more white depending on angle of light source); with long, erect dark setae ventrally. Antennomeres III–IV with yellowish white pubescence ventrally and on inner side, nearly glabrous on remaining surface; with long, erect, moderately sparse dark setae ventrally. Antennomeres V–VI with sparse yellowish white pubescence dorsally, with dense fringe of long, erect black setae ventrally and part on inner side. Antennomeres VI–XI with sparse yellowish white pubescence. Antennal formula (ratio) based on length of antennomere III: scape = 0.62; pedicel = 0.11; IV = 0.67; V = 0.32; VI = 0.29; VII = 0.29; VIII = 0.26; IX = 0.24; X = 0.22; XI = 0.27.

Thorax. Prothorax slightly wider than long, with basal constriction. Pronotum with distinct piriform gibbosity centrally, from basal fifth to shortly after middle; coarsely, moderately abundantly punctate except on smooth central gibbosity; with yellowish brown pubescence not obscuring integument (partially lost in some areas in the holotype, not so in the paratype) except glabrous central longitudinal band, from basal fifth to apex; with long, sparse yellowish setae throughout. Sides of prothorax coarsely, moderately abundantly punctate; with yellowish brown pubescence not obscuring integument on basal area (denser toward pronotum and close to procoxal cavity) nearly glabrous on remaining surface (denser on entire area close to pronotum in the paratype). Prosternum and prosternal process with yellowish brown pubescence nearly obscuring integument. Mesoventrite with yellowish white pubescence not obscuring integument centrally, yellowish brown, denser laterally. Mesanepisternum and mesepimeron coarsely punctate (more abundant in the former); with dense yellowish brown pubescence on some areas (apparently, at least partially lost); mesoventral process with yellowish white pubescence not obscuring integument. Metanepisternum coarsely, moderately sparsely punctate; glabrous except for narrow basal and distal area with yellowish brown pubescence. Metaventricle coarsely, moderately abundantly punctate laterally; with yellowish brown pubescence interspersed with yellowish white pubescence basally (except glabrous area close to metanepisterna), transverse distal area close to metacoxae, and longitudinal central area (shorter and sparser on this latter). Scutellum with yellowish brown pubescence not obscuring integument except glabrous distal area (basally obscuring integument in the paratype). **Elytra.** Sides gradually narrowed from base to apex; humerus projected; humeral carina distinct from humerus to distal third, but gradually less so toward its distal area; coarsely, abundantly, aligned punctate on basal 2/3, punctures gradually finer toward distal third; distal third smooth; apex truncate, outer angle spiniform, sutural angle rounded; with dense yellowish brown pubescence basally on each side of scutellum, but with glabrous humerus; pubescence becoming pale yellow, somewhat sparser, forming wide band on side of sutural margin, not reaching distal third, then distinctly narrower and sparser along suture; remaining surface nearly glabrous except sides of distal third and apex with sparse pubescence. **Legs.** Femora with moderately dense yellowish white pubescence dorsally and ventrally, glabrous laterally. Protibiae with dense golden pubescence ventrally on distal half; meso- and metatibiae with bristly, abundantly golden pubescence on distal half.



FIGURES 32–40. 32–36, *Acanthoderes (Acanthoderes) barrerae*, 32–34, holotype male, 32, dorsal habitus, 33, ventral habitus, 34, lateral habitus, 35–36, female, 35, head, frontal view, 36, dorsal habitus; 37–40, *Cirrhicera bankoi* sp. nov., holotype male, 37, head, frontal view, 38, dorsal habitus, 39, ventral habitus, 40, lateral habitus. Photographs 32–36 by Enrique Ramírez García (UNAM).

Abdomen. Ventrites I–IV with transverse yellowish white distal pubescent band; ventrite I with dense yellowish white pubescence close to metacoxal cavities and laterally, sparser centrally, interspersed with a few long, erect yellowish setae; ventrites II–IV with narrow yellowish white pubescent band laterally, near glabrous centrally except a few long, erect yellowish white setae; ventrite V with yellowish white pubescence, denser on distal half. In paratype, abdominal pubescence is distinctly denser and yellower throughout. Apex of ventrite V distinctly emarginate centrally.

Dimensions in mm (holotype male–paratype male). Total length, 12.90–11.25; prothoracic length, 2.45–2.20; basal prothoracic width, 2.60–2.35; distal prothoracic width, 2.45–2.25; widest prothoracic width, 2.65–2.45; humeral width, 3.90–3.45; elytral length, 8.75–7.90.

Type material. Holotype (MZSP) and paratype (IMQC) males from MEXICO, *Chiapas*: El Triunfo (1650 m), 10–12.VII.2009, D. Curoe col.

Etymology. This species is dedicated to our collaborator Alexandre Banko.

Remarks. The general pubescence in the holotype and paratype is very similar in the concentration and distribution dorsally and ventrally, except the denser abdominal pubescence in the paratype. However, we do not know which the true pubescence pattern in the species is, because, apparently, at least part of the pubescence is lost in the two types.

Based on the pubescence present in the holotype and paratype, and black color of the legs, *Cirrhicera bankoi* does not match with any other known species of the genus. The slightly more similar species it would be *C. cinereola* Bates, 1881, but besides the distinctly denser general pubescence, the upper eye lobes are distinctly narrower and distant each other (see photograph of the holotype at Bezark 2017).

Cirrhicera bankoi can be included in the alternative of couplet “2” from Chemsak (1972) (modified):

- 2(1). Elytra with pubescent fasciae covering most of surface and without black spots, or basally and medially transverse 3
- Elytra with pubescent fasciae covering most of surface and with black spots, or with large areas without pubescence 2'
- 2'(2). Distance between upper eye lobes wider than three times width of one upper eye lobe; elytra densely pubescent throughout with two black spots. Mexico (Chiapas), Guatemala, Honduras, El Salvador, Costa Rica. *C. cinereola* Bates, 1881
- Distance between upper eye lobes equal to two times width of one upper eye lobe; elytra without dense pubescence throughout and without black spots. Mexico (Chiapas) *C. bankoi* sp. nov.

POLYRHAPHIDINI

Polyrhaphis michaeli McCarty, 1997

Polyrhaphis michaeli McCarty, 1997: 43; Monné, 2017b: 562 (cat.)

It was originally described from Mexico (Quintana Roo). Currently it is also known from the Mexican state of Yucatán.

Material examined. MEXICO, *Oaxaca*: Metates (980 m), female, 1–5.VI.2013, local collector (IMQC). **New state record.**

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